

Federal Communications Commission

§ 90.549

have an HAAT between 350 and 600 meters, public safety stations must add the following DISTANCE FACTOR to the value obtained from the referenced Tables in § 90.309 and to the distance for control and mobile stations on adjacent TV/DTV channels (96.5 km).

DISTANCE FACTOR = (TV/DTV HAAT-350) ÷ 14 in kilometers, where HAAT is the TV or DTV station antenna height above average terrain obtained from its authorized or proposed facilities, whichever is greater.

(iv) For all co-channel and adjacent channel TV/DTV stations which have an antenna height above average terrain greater than 600 meters, public safety stations must add 18 kilometers as the DISTANCE FACTOR to the value obtained from the referenced Tables in § 90.309 and to the distance for control and mobile stations on adjacent TV/DTV channels (96.5 km).

NOTE TO § 90.545: The 88.5 km (55.0 mi) Grade B service contour (64 dBuV/m) is based on a hypothetical TV station operating at an effective radiated power of one megawatt, a transmitting antenna height above average terrain of 610 meters (2000 feet) and the Commission's R-6602 F(50,50) curves. See § 73.699 of this chapter. Maximum facilities for TV stations operating in the UHF band are 5 megawatts effective radiated power at an antenna HAAT of 610 meters (2,000 feet). See § 73.614 of this chapter. The equivalent contour for DTV stations is based on a 41 dBuV/m signal strength and the distance to the F(50,90) curve. See § 73.625 of this chapter.

[63 FR 58651, Nov. 2, 1998, as amended at 65 FR 53646, Sept. 5, 2000]

§ 90.547 Interoperability channel capability requirement.

Except as noted below, mobile and portable transmitters operating in the 764-776 MHz and 794-806 MHz frequency bands must be capable of operating on all of the designated nationwide narrowband Interoperability channels pursuant to the standards specified in this part.

(a) Mobile and portable transmitters that are designed to operate only on the Low Power Channels specified in §§ 90.531(b)(3) and (b)(4) are exempt from this Interoperability channel requirement.

(b) Mobile and portable transmitters that are designed to operate only on the narrowband data Interoperability

channels specified in § 90.531 (b)(1)(i) are exempt from this Interoperability channel requirement.

(c) Mobile and portable transmitters that are designed to operate only in the voice mode do not have to operate on the narrowband data Interoperability channels specified in § 90.531 (b)(1)(i).

[66 FR 10636, Feb. 16, 2001]

§ 90.548 Interoperability technical standards.

(a) Transmitters operating on those narrowband channels in the 764-776 and 794-806 MHz band designated for interoperability (See 90.531) shall conform to the following technical standards:

(1) Transmitters designed for voice operation shall include a 12.5 kHz bandwidth mode of operation conforming to the following standards: ANSI/TIA/EIA 102.BAAA-1 (common air interface) for operation in the 12.5 kHz FDM mode; ANSI/TIA/EIA 102.BABA (vocoder).

(2) Transmitters designed for data transmission shall include a 12.5 kHz bandwidth mode of operation conforming to the following standards: ANSI/TIA/EIA 102.BAEA (data overview); ANSI/TIA/EIA 102.BAEB (packet data specification); ANSI/TIA/EIA 102.BAEC (circuit data specification); ANSI/TIA/EIA 102.BAEA (radio control protocol); ANSI/TIA/EIA 102.BAAA-1 (common air interface) for operation in the 12.5 kHz FDM mode.

(b) Copies of the standards listed in this Section that are incorporated by reference can be purchased from the American National Standards Institute, Washington, DC Headquarters, 1819 L Street, NW, 6th Floor, Washington, DC 20036.

(c) Copies of the standards listed in this Section that are incorporated by reference may be inspected at the Federal Communications Commission, 445 12th Street, SW, Washington, DC (Reference Information Center) or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington DC.

[66 FR 10636, Feb. 16, 2001]

§ 90.549 Transmitter certification.

Transmitters operated in the 764-776 MHz and 794-806 MHz frequency bands